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Water Quality Report is Included in this Issue

The Environmental Protection Agency requires the City of Gardner to annually provide you an annual Water Quality Report. **The 2007 Consumer Confidence Drinking Water Report is part of this utility bill.** The brochure reports findings to you on the levels of chemicals in the City of Gardner's drinking water.



All of our results were within established limits and the City received no violations.

City of Gardner Wastewater Treatment Division Receives KWEA Awards

The City of Gardner proudly announces that, for the third time in as many entries, our Kill Creek Wastewater Treatment Plan has received two distinguished awards form the Kansas Water Environment Association.

At the 2008 annual KWEA Conference in Topeka, the Gardner Wastewater Treatment Division was awarded the KWEA 2007 Class IV Plant Award and the 2007 Safety Award/Design Capacity B-1.0 to 5.0 M.G.D.

The Wastewater Division also received these awards in 2004 and 2005, and were ineligible to be considered in 2006 because the awards are only given to the same plant two consecutive years.

Summer Outdoor Water Saving Tips

- Don't overwater your lawn. As a general rule, lawns only need watering every five to seven days in the summer. A hearty rain eliminates the need for watering for up to two weeks. Most of the year, lawns only need one inch of water per week.
- Water lawns during the early morning hours when temperatures and wind speed are the lowest. This reduces losses from evaporation.
- Raise the lawn mower blade to at least three inches or to its highest level. A higher cut encourages grass roots to grow deeper, shades the root system and holds soil moisture better than a closely-clipped lawn.



CITY OF GARDNER

Consumer Confidence Report – 2008 Covering Calendar Year – 2007

This Consumer Report provides general information from the Environmental Protection Agency and water quality data for Calendar Year 2007. To learn more about your drinking water, please attend any of the regularly scheduled Council Meetings which are held the 1st and 3rd Mondays of each month. For more information contact, Jim Melvin at 913-856-0914 or visit www.gardnerkansas.gov.

We treat your water to remove several contaminates and we also add disinfectant to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the source water assessment, please contact us or view the results on line at www.kdheks.gov/nps/swap/SWreports.html.

Some people may be more vulnerable to contaminates in drinking water than the general population. Immuno-compromised persons such as those with cancer under going chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in sources of water before we treat it include:

<u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife

<u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity

<u>Organic contaminates</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm-water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminates in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 15 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

Water Quality Data

The tables below list all of the drinking water contaminants for which tests were done. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2007. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.

Terms & Abbreviations

<u>Maximum Contaminant Level Goal (MCLG)</u>: the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety. **Non-Detects (ND)**: Contaminant not detected.

<u>Maximum Contaminant Level (MCL)</u>: the highest level of contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **Million Fibers per liter (MFL)**: measure of presence of asbestos fibers

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Parts per Million (ppm) or milligrams per liter (mg/l) Parts per Billion (ppb) or micrograms per liter (µg/l)

<u>Picocuries per Liter (pCi/L)</u>: a measure of the radioactivity in water. <u>Millirems per Year (mrem/yr)</u>: measure of radioactivity in water.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity of 5 NTU is just noticeable to the average person.

Secondary Maximum Containment Level (SMCL): monitored but not regulated.

<u>Maximum Residual Disinfectant Level (MRDL):</u> Highest level of disinfectant allowed in drinking water. Evidence indicates disinfectant is needed to control microbial contaminants.

<u>Treatment Technique (TT):</u> A required process to reduce levels of a contaminant.

Testing Results for the CITY OF GARDNER

In reading the data below, please compare the MCL column to the Highest Value column or Highest RAA column. The range column shows the lowest and highest test results for that specific item.

Microbiological	Result	MCL	MCLG	Typical Source	
No Detected Results were Foun	d in the Calendar Year of 2007				

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source	
BARIUM	4/4/2007	0.086	0.086	ppm	2	2	Discharge from metal refineries;	
FLUORIDE	4/4/2007	1.4	1.2 - 1.4	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.	
NITRATE	4/4/2007	0.34	0.33 - 0.34	ppm	10	10	Runoff from fertilizer use	
SELENIUM	4/4/2007	1.1	1.1	ppb	50	50	Erosion of Natural Deposits	
TURBIDITY	2/16/2006	0.66	0.56 - 0.66	NTU	1		Soil runoff	

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2007	31	24 - 46	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2007	50	28 - 64	ppb	80	0	By-product of drinking water chlorination

More results on next page...



New Kill Creek Water Tower during construction Photo—Winter 2007

Lead and Copper	Monitoring Period	90 [™] Per- centile	95 [™] Percentile Range		Unit	AL	Sites Over AL	Typical Source	
COPPER	2005-2007	0.3	0	0.0022 - 0.069	ppm	1.3	0	Corrosion of household plumbing systems	
LEAD	2005-2007	17	0	1.2-1.3	ppb	15	0	Corrosion of household plumbing systems	

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG		Typical Source Erosion of Natural Deposits	
GROSS ALPHA, INCLDNG RA & U, EXCLDNG RN	6/13/2005	10	10	PIC/L	15	0	Erosion of Na		
Secondary Contaminants	Secondary Contaminants		Collection Date		Highest Value		Range	Unit	SMCL
ALKALINITY, TOTAL		4/4/2007		1	121		121	MG/L	300
ALUMINUM		4/4/20	007	0.012		0.012		MG/L	0.05
CALCIUM		4/4/2007		47		47		MG/L	200
CARBON, TOTAL ORGANIC (CARBON, TOTAL ORGANIC (TOC)		2/14/2007		3.9		7 - 3.9	ppm	10000
CHLORIDE		4/4/2007		36		36		MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM		4/4/2007		410		410		UMHOS/CM	1500
HARDNESS, TOTAL (AS CAC	O3)	4/4/2007		140		140		MG/L	400
MAGNESIUM		4/4/2007		6.2		6.2		MG/L	150
NICKEL		4/4/20	007	0.0	0.0021 0.0021		MG/L	0.1	
PH	PH		007	7.3		7.3		PH	8.5
POTASSIUM		4/4/2007		4.6		4.6		MG/L	100
SILICA		4/4/2007		3.9		3.9		MG/L	50
SODIUM		4/4/20	007	25		25		MG/L	100
SULFATE		4/4/20	007	23		23		MG/L	250
TDS		4/4/2007		220		220		MG/L	500

During the 2007 calendar year, we had no noted violation(s) of drinking water regulations.

4/4/2007

Additional Required Health Effects Language.

ZINC

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

0.013

0.013

MG/L

5

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.